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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,572	02/09/2004	Sudhir Govind Deshmukh	IJ0074USNA	1462

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WILMINGTON, DE 19805

EXAMINER
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MARTIN, LAURA E

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/775,572	<b>Applicant(s)</b> DESHMUKH ET AL.	
	<b>Examiner</b> Laura E. Martin	<b>Art Unit</b> 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/9/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 5, 6-12, 15-17, 24, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Owen et al. (US 20040085565).

As per claims 1, 24, and 25, Owen et al. teaches a process for monitoring dispensing of one or more dispensable compositions comprising: reading a current dispensable composition information disposed on identification tags [0030] affixed to reservoirs positioned in a dispensing device (figure 4, element 32B), said reservoirs containing said dispensable compositions (figure 4, elements 64) and wherein said current information is stored on a host computer (figure 4, element 67) in communication with a client computer of said device (figure 4, element 30B), or on said client computer and said host computer; terminating said process if said current information does not match with a stored dispensable composition information of said dispensable compositions stored on said host computer or on said client computer and said host computer [0019]; or continuing said process if said current information matches with said stored information (figure 6, elements 602, 604, 606), said process

further comprising: dispensing one or more said dispensable compositions in accordance with a dispensing program through one or more dispensing heads of said dispensing device ([0029] figure 4, element 36); generating updated dispensable composition information of said dispensable compositions [0029]; writing said updated information to said host computer, or on said host computer and said client computer [0030]. Owen et al. also teaches replenishing some or all of said dispensable compositions dispensed by said dispensing device [0002].

As per claim 2, Owen et al. teaches current dispensable composition information being read with one or more means for reading said identification tags [0026], (figure 1, element 104B).

As per claim 4, Owen et al. teaches said updated dispensable composition information is written with one or more means for writing to said identification tags (figure 8, toner/ink; [0057]).

As per claim 5, Owen et al. teaches said process is terminated if current quantities of said dispensable compositions registered in said current dispensable composition information exceed stored quantities of said dispensable compositions registered in said stored dispensable composition information [0019].

As per claims 6 and 7, Owen et al. teaches said current and updated composition information comprises current quantity of said dispensable composition contained in said dispensable composition reservoir, identity of said dispensable composition, compositional structure of said dispensable composition, price of said dispensable composition contained in said dispensable composition reservoir, serial number of said

dispensable composition reservoir, place of manufacture of said dispensable composition, location of said dispensable composition reservoir, date of manufacture of said dispensable composition, date of expiration of said dispensable composition, toxicity information of said dispensable composition, MSDS of said dispensable composition, manufacturer of said dispensable composition and contact information thereof; or a combination thereof [0015].

As per claim 8, Owen et al. teaches replenishing some or all of said dispensable compositions dispensed [0002].

As per claim 9, Owen et al. teaches said identification tag is a RFID tag [0017].

As per claim 10, Owen et al. teaches one or more identification tag interrogators positioned near said reservoirs comprise said means for reading from and said means for writing to said tags ([0031] figure 4, element 48).

As per claim 11, Owen et al. teaches identification tag interrogator is a RFID tag interrogator [0031].

As per claim 12, Owen et al. teaches said identification tag is a passive or active RFID tag [0031].

As per claim 15, Owen et al. teaches dispensable composition is an ink jet ink, electrically conductive ink, or biomaterial [0018].

As per claim 16, Owen et al. teaches said dispensing composition being dispensed on a target substrate [0034].

As per claim 17, Owen et al. teaches said target substrate is a cellulose paper, polymeric film, polymeric laminate, woven fabric, non-woven fabric, a biologically active substrate, or a circuit board [0034].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al. (US 20040085565) in view of Tojo (US 20030090573).

Owen et al. teaches the process of claim 1; however, it does not teach deducting dispensed quantities of one or more dispensable compositions from current quantities registered in said current dispensable composition information to arrive at updated quantities of one or more of the dispensable compositions registered in said updated dispensable composition information.

Tojo teaches deducting dispensed quantities of one or more dispensable compositions from current quantities registered in said current dispensable composition information to arrive at updated quantities of one or more of the dispensable compositions registered in said updated dispensable composition information [0117].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Owen et al. with the disclosure of Tojo in order to improve the dispenser control process.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al. (US 20040085565) in view of Lawler et al. (US 5964656).

Owen et al. teaches the process of claim 12, however it does not teach a passive or an active RFID tag disposed on an insulated substrate.

Lawler et al. teaches a passive or an active RFID tag disposed on an insulated substrate (column 9, lines 27-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Owen et al. with the disclosure of Lawyer et al. so that there is no tag interference.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al. (US 20040085565) in view of Allen (US 4973993).

Owen et al. teaches the process of claim 1; however it does not teach said reservoir is a disposable bag nested in a receptacle located in said dispensing device.

Allen teaches a reservoir is a disposable bag nested in a receptacle located in said dispensing device (figure 3, elements 14 and 142, column 1, lines 7-8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Owen et al. with the disclosure of Allen so that the bag can be easily replaced when empty.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al. (US 20040085565) in view of Lawrence et al. (US 20040175515).

Owen teaches the method of claim 16; however, it does not teach the dispensable composition being electrically conductive ink deposited on said target substrate comprising an electrically insulated film, wherein said target substrate is one or more RFID tags.

Lawrence et al. teaches a dispensable composition being electrically conductive ink deposited on said target substrate comprising an electrically insulated film [0038-0039], wherein said target substrate is one or more RFID tags [0005].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Owen et al. with the disclosure of Lawrence et al. to create a simplified process of creating RFID tags.

Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al. (US 20040085565) in view of Ma (US 20020005600).

Owen et al. teaches the process of claim 16; however it does not teach the dispensable composition being biomaterial deposited on said target substrate comprising a biologically active substrate, wherein said biologically active target



substrate is a two-dimensional or a three-dimensional array used in diagnostic or screening devices, or wherein said dispensable composition comprises clumps or animal or human cells dispensed on said target substrate comprising a scaffolding substrate and comprising growing tissues, organs, cells, skin grown on said scaffolding substrate.

Ma teaches a dispensable composition being biomaterial deposited on said target substrate comprising a biologically active substrate [0069], wherein said biologically active target substrate is a two-dimensional or a three-dimensional array used in diagnostic or screening devices, or wherein said dispensable composition comprises clumps or animal or human cells dispensed on said target substrate comprising a scaffolding substrate and comprising growing tissues, organs, cells, skin grown on said scaffolding substrate [0003].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Owen with the disclosure of Ma in order to provide an simplified method of cell application and growth.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin.

 3/3/06  
**MANISH S. SHAH**  
**PRIMARY EXAMINER**